

GENERAL NOTES

1. Depending on the depth of the undermining, place one grout bag or stack several layers of grout bags along the face of the abutment or pier in front of the undermined area. If bags are stacked, bags in successive rows and tiers shall be staggered.
2. Once the vent/fill pipes have been installed and the bags are filled, pump the grout into the undermined area until material appears in the top of adjacent vent pipes. Cut or remove the vent/fill pipes flush with the top of the bags after the pumping operation is complete.
3. Adequate venting of the water to be displaced in the undermined area is important. The water must be able to escape when it is displaced by the grout pumped into the cavity. A 4' maximum spacing of the vent/fill pipes is recommended.
4. It is important to keep the nozzle buried in the grout during the pumping. This is to reduce the amount of mixing of the grout and the water to be displaced.
5. Debonding jackets should be placed around piles to prevent the grout from adhering to the piles if the exposed height is 3'-0" or greater. This is to prevent the additional weight of the grout from reducing the piles capacity.
6. If possible, clean out unstable material along the bottom of the undermined area prior to filling with grout.

FOR OFFICE USE ONLY

	APPROVAL <i>L.S. Friedman</i> DIRECTOR OFFICE OF BRIDGE DEVELOPMENT DATE: 11/6/96	STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF BRIDGE DEVELOPMENT GROUT BAG INSTALLATION FOR UNDERMINED AREAS AT PIERS AND ABUTMENTS GENERAL NOTES	STRUCTURAL REPAIRS										
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